

I. AMENDMENTS TO THE CLAIMS

1-52 (Cancelled).

53. (Currently amended) ~~A fuel cell~~ An electrochemical system comprising:
~~a fuel~~ an electrochemical cell stack having a layering of a plurality of ~~fuel~~
electrochemical cells and including an electrochemically active region,
a plurality of bipolar plates separating said ~~fuel~~ electrochemical cells from one
another, said bipolar plates including openings for media for said ~~fuel~~ electrochemical
cells, and wherein said ~~fuel~~ electrochemical cell stack is placed under mechanical
compression in a direction of said layering;
at least one resilient bead arrangement around at least one of said openings,
said at least one resilient bead arrangement including at least one flank;
at least one perforation on said at least one flank, said at least one perforation for
conducting the media.

54. (Currently amended) ~~A fuel~~ An electrochemical cell system according to
claim 53, wherein said at least one perforation is circular, oval, ~~and~~ or angular in cross
section.

55. (Currently amended) ~~A fuel~~ An electrochemical cell system according to claim 53, further comprising:

a bead interior and a bead outer surface of said at least one resilient bead arrangement; and

a duct connected to said at least one perforation, wherein said duct is closed at least towards said beading outer surface and is connected to said beading interior.

56. (Currently amended) ~~A fuel~~ An electrochemical cell system according to claim 53, wherein said at least one perforation is open towards said electrochemically active region.

57. (Currently amended) ~~A fuel~~ An electrochemical cell system according to claim 53, wherein said at least one resilient bead arrangement further includes perforations on two flanks.

58. (Currently amended) ~~A fuel~~ An electrochemical cell system according to claim 53, wherein said bipolar plate further comprises a carrier wherein said at least one resilient bead arrangement is part of said carrier.

59. (Currently amended) ~~A fuel~~ An electrochemical cell system according to claim 53, wherein at least a portion of said at least one resilient bead arrangement is coated with at least one of a microseal media and an elastomer.

60-61 (Cancelled)

62. (New) An electrochemical cell system according to claim 53, wherein said electrochemical system is a fuel cell system and said electrochemical cell stack is a fuel cell stack.

63. (New) An electrochemical cell system according to claim 53, wherein said electrochemical system is an electrochemical compressor system and said electrochemical cell stack is an electrochemical compressor stack.